Evidenz für klinische Entscheidungsunterstützung

Dr. Max Plischke
Literatur: „Clinical Decision Support“

36211 Publikationen
Endpoints:
1) Clinical
2) Health care process
3) User workload efficiency
4) Economics
Outcome: Health Care Process

Raebel, JAMA Internal Medicine, 2005
Dexter et al., JAMA, 2004
Samore, JAMA, 2005
Outcome: Clinical

Sequist et al. Arch Intern Med., 2009

HRQOL = health related quality of life
Outcome: Economic

**Cost-Effectiveness of the Diabetes Care Protocol, a Multifaceted Computerized Decision Support Diabetes Management Intervention That Reduces Cardiovascular Risk**

**OBJECTIVE** — The Diabetes Care Protocol (DCP), a multifaceted computerized decision support diabetes management intervention, reduces cardiovascular risk of type 2 diabetic patients. We performed a cost-effectiveness analysis of DCP from a Dutch health care perspective.

**RESEARCH DESIGN AND METHODS** — A cluster randomized trial provided data of DCP versus usual care. The 1-year follow-up patient data were extrapolated using a modified Dutch microsimulation diabetes model, computing individual lifetime health-related costs, and health effects. Incremental costs and effectiveness (quality-adjusted life-years [QALYs]) were estimated using multivariate generalized estimating equations to correct for practice-level clustering and confounding. Incremental cost-effectiveness ratios (ICERs) were calculated and cost-savings lead to fewer micro- and macrovascular complications and improve health outcomes. Intensive treatment, based on current guidelines, might lead to lower health care costs. However, it seems difficult to follow guidelines, and many type 2 diabetic patients do not meet the strict targets for good glycemic and cardiovascular control.

New strategies like the Diabetes Care Protocol (DCP) have been developed to improve the quality and management of diabetes care (6). The DCP comprises several interventions, including a diabetes consultation hour run by a practice nurse,

Cleveringa et al, Diabetes Care, 2010
Outcome: User Workload & Efficiency

<table>
<thead>
<tr>
<th>User workload and efficiency outcomes</th>
<th>Insufficient</th>
<th>5 (4 fair, 1 poor)</th>
<th>NA</th>
<th>–</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on user knowledge</td>
<td>Insufficient</td>
<td>0</td>
<td>NA</td>
<td>–</td>
</tr>
<tr>
<td>Number of patients seen per unit time</td>
<td>Insufficient</td>
<td>0</td>
<td>NA</td>
<td>–</td>
</tr>
<tr>
<td>Clinician workload</td>
<td>Insufficient</td>
<td>0</td>
<td>NA</td>
<td>–</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Low</td>
<td>7 (3 good, 4 fair)</td>
<td>NA</td>
<td>–</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Relationship-centered outcomes</th>
<th>Insufficient</th>
<th>6 (4 good, 1 fair, 1 poor)</th>
<th>NA</th>
<th>–</th>
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</thead>
<tbody>
<tr>
<td>Patient satisfaction</td>
<td>Insufficient</td>
<td></td>
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Insufficient Evidence
Zusammenfassung

• „Clinical Decision Support“ wächst beträchtlich (dzt. 3500 Artikel/Jahr)

• Analyse einer aktuellen Meta-Analyse (160 RCTs)
  – Hohe Evidenz
    • Recommended treatment ordered/prescribed
    • Recommended preventive care service ordered
  – Moderate Evidenz
    • Morbidity
    • Recommended clinical study ordered/completed
    • Cost

• Viel Potential!